## What is the Combustion Technology University Alliance?

**Introduction:** The development of the Combustion Technology University Alliance (CTUA) is in response to program reviews by Coal Utilization Research Council, National Science Foundation, and Office of Management and Budget which stated that the Combustion Program needed to improve University involvement in both research activities and Peer reviews. The Alliance will help the Combustion technologies program to respond to President Bush's "Clear Skies Initiative" (CSI) in addition to the challenges of improving and advancing new combustion technologies. CSI is a legislative proposal to control  $SO_x$ ,  $NO_x$ , and mercury emissions from power plants. The 1<sup>st</sup> CTUA workshop identified the most pressing research needs related to advanced combustion systems and the associated issues such as overall efficiency, environmental emissions, multi-pollutant control, improved sorbents and catalysts, mercury monitoring and capture, and better understanding of the underlying reaction chemistry during combustion.

## Vision:

The vision of the Combustion Technology University Alliance is to conduct applied University research resulting in the commercialization of economically viable, highly efficient (>50%), and near zero emission advanced coal combustion power plants by 2020 coal-fired power plants operating in the U.S. and abroad.

## Mission:

The mission of the Combustion Technology University Alliance is to:

- Promote cooperation between academia, private industry and the National Energy Technology Laboratory,
- Develop novel approaches and concepts via applied research focused on advanced combustion issues, and
- Develop and provide an educated work force for advanced power systems of the future.